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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,921	09/26/2003	David Woodhouse	113715.142	9463

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BOSTON, MA 02109

EXAMINER

WOOD, WILLIAM H

ART UNIT PAPER NUMBER

2193

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/672,921	Applicant(s) WOODHOUSE, DAVID	
	Examiner William H. Wood	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

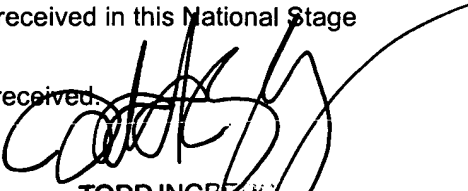
Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


TODD INGEBERG
PRIMARY EXAMINER

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-20 are pending and have been examined.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 5, 7-9, 11-13, 15-16 and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by “Efficient Algorithms for Sorting and Synchronization” by Andrew Tridgell.

Claim 1

Tridgell disclosed a method for updating a seed file to match a target file (*page 49-69, chapter 3, rsync*), said method comprising:

generating target file checking data for one or more blocks of said target file (*page 53-54, section 3.2.4*);

storing at least a portion of said target file checking data in a cache (*page 101-102; hardware includes caches and RAM, which are used (ie store values) to speed processing*);

receiving seed file checking data corresponding to one or more blocks of said seed file (*page 50, element 1, section 3.2; page 54-55, section 3.2.5*);

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comparing said seed file checking data with said target file checking data to identify differences in blocks of said seed file and blocks of said target file (*page 55-58, section 3.2.6*); and

transmitting information for revising seed file blocks which are different from target file blocks such that said seed file blocks match said target file blocks (*page 58, first paragraph of section 3.2.7*).

Claim 2

Tridgell disclosed the method of claim 1, wherein said target file checking data and said seed file checking data each comprise weak level checking data and strong level checking data, and wherein said comparing comprises comparing said weak level checking data and next comparing strong level checking data only if a match is identified in said weak level checking data (*page 53-55, section 3.2.4 and 3.2.5; in particular page 54, first paragraph under section 3.2.5*).

Claim 3

Tridgell disclosed the method of claim 1, wherein said target file checking data and said seed file checking data each comprise a 32-bit checksum and a 128-bit checksum (*page 53-55, section 3.2.4 and 3.2.5*).

Claim 5

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Tridgell disclosed the method of claim 1, wherein said target file checking data and said seed file checking data each comprise a checksum (*page 53-55, section 3.2.4 and 3.2.5*).

Claim 7

Tridgell disclosed the method of claim 1, further comprising decompressing said target file prior to said generating (*page 76, section 4.4.1, second paragraph*).

Claim 8

Tridgell disclosed the method of claim 1, wherein said seed file and said target file are decompressed prior to said generating, wherein said seed file blocks are revised in accordance with said transmitted information to match said target file blocks, and wherein said revised seed file blocks are recompressed after revising (*page 76, section 4.4.1, second paragraph*).

Claim 9

Tridgell disclosed the method of claim 8, wherein said seed file comprises a compressed payload, previously separated from a compound file, and wherein said revised seed file is appended to a header file after said recompressing to constitute a revised compound file (*page 76, section 4.4.1, first and second paragraphs; compressed file formats*).

Claims 11-13, 15-16 and 18-20

The limitations of claims 11-13, 15-16 and 18-20 correspond to claims 1, 2, 5, 8 and 9 and therefore are rejected in the same manner.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 6, 10, 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over “Efficient Algorithms for Sorting and Synchronization” by Andrew **Tridgell**.

Claims 4 and 17

Tridgell disclosed the method of claim 1, wherein said target file checking data and said seed file checking data each comprise weak level checking data and strong level checking data, and wherein said storing comprises storing said weak level checking data associated with said target file (*page 53-55, section 3.2.4 and 3.2.5; in particular page 54, first paragraph under section 3.2.5*). **Tridgell** did not explicitly state *and storing only said strong level checking data associated with said target file expected to match strong level checking data associated with said seed file*. However, **Tridgell** demonstrated that it was known at the time of invention to use the strong level checking

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data sparingly (*page 53-55, section 3.2.4 and 3.2.5; in particular page 54, first paragraph under section 3.2.5*). It would have been obvious to one of ordinary skill in the art at the time of invention to compute and thus store strong level data only as anticipated as being needed as suggested by **Tridgell's** own teaching. This implementation would have been obvious because one of ordinary skill in the art would be motivated to save in expensive computation and time by "preventing excessive use of the strong signature algorithm".

The limitations of claim 17 correspond to claim 4 and therefore are rejected in the same manner.

Claim 6

Tridgell did not appear to explicitly state *wherein said target file checking data stored in a cache are used with multiple updating requests received from a plurality of clients*.

However, **Tridgell** demonstrated that it was known at the time of invention to provide information to multiple clients (page 80, section 4.5, first three paragraphs). It would have been obvious to one of ordinary skill in the art at the time of invention to implement the rsync system with a plurality of clients as found in the *web* as found in **Tridgell's** own teaching. This implementation would have been obvious because one of ordinary skill in the art would be motivated to make efficient file/data synchronization available the network thus reducing latency.

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Claims 10 and 14

Tridgell did not explicitly state *wherein said compound file and said revised compound file comport with an RPM Package Manager format*. Official Notice is taken that it was known at the time of invention to make use of RPM Package Manager format. It would have been obvious to one of ordinary skill in the art at the time of invention to implement the file/data synchronization system of **Tridgell** with RPM format. This implementation would have been obvious because one of ordinary skill in the art would be motivated to provide a standard tool end users are already familiar with for delivering files/data for synchronization.


The limitations of claim 14 correspond to claim 10 and therefore are rejected in the same manner.

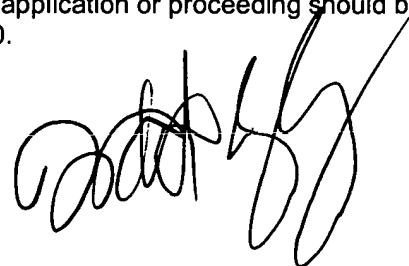
Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Wood whose telephone number is (571)-272-3736. The examiner can normally be reached 9:00am - 5:30pm Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571)-272-3719. The fax phone numbers for the organization where this application or proceeding is assigned are (571)273-8300 for regular communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.


William H. Wood
January 23, 2006



**TODD INGBERG
PRIMARY EXAMINER**